

Best Local	0;	Indels	0;	Gaps	0
Mismatches	0;	Mismatches	0;		
Matches	11;	Conservative			

ed Mar 24 08:49:04 1999

PD 31-DEC-1997. E03253.
 PE 20-JUN-1997. EP-810421.
 PR 24-JUN-1996. EP-810421.
 PA (ROK-) ROTKREUZSTIFTUNG ZENT LAB BLUTSPENDE.
 PI Amstutz H, Imboden M, Miescher S, Morell A, Stadler B,
 PI Vogel M;
 DR MPI; 98-0717173/07.
 DR N-PSDB; V19745.
 PT New Rhesus D antigen binding polypeptide(s) - used to neutralise
 PT Rhesus D antigen in therapy, e.g. for treating idiopathic
 PT thrombocytopenic purpura
 PS Claim 1; Fig 5B; 68pp; English.
 CC This sequence is the antibody LD1-117-VL chain sequence, which is a
 CC polypeptide of the invention. The polypeptides are capable of forming
 CC antigen binding structures with specificity for Rhesus D antigens which
 CC include Rhesus D-specific CDR 1, CDR 2, and CDR 3 regions of pairs of
 CC variable heavy (VH) and variable light (VL) chain sequences. The
 CC antibodies are active against the Rhesus D antigen. They can be used for
 CC treating disorders which would benefit from anti-Rhesus D immunoglobulin,
 CC e.g. idiopathic thrombocytopenic purpura. They can also be used for the
 CC protection of Rhesus negative women before or immediately after the birth
 CC of a Rhesus positive child to prevent haemolytic disease of the newborn
 CC (HDN) in subsequent pregnancies. In addition, anti-Rhesus D
 CC immunoglobulin can be used after transfusions of Rhesus positive blood
 CC to Rhesus negative recipients in order to prevent sensitisation to the
 CC Rhesus D antigen. The products can also be used as diagnostic reagents.
 SO Sequence 106 AA;

Query Match 100.0%; Score 63; DB 29; Length 106;
 Best Local Similarity 100.0%; Pred. No. 3.52e+00;
 Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 2 mtgspsslsas 12
 |||||
 OY 24 MTQSPSSLSAS 34

RESULT 12
 ID W22412 standard; Protein; 106 AA.
 AC W22412;
 DT 08-DEC-1997 (first entry)
 DE Humanised alpha-4 integrin antibody 21.6 VL Ia.
 KW Alpha-4 integrin; humanised antibody; monoclonal antibody 21.6;
 KW asthma; atherosclerosis; AIDS; dementia; diabetes; tumour;
 KW metastasis; inflammatory bowel disease; rheumatoid arthritis;
 KW transplant rejection; graft versus host disease; nephritis;
 KW acute dermatitis; psoriasis; myocardial ischemia;
 KW acute leukocyte mediated lung injury; therapy.
 KW Chimeric Mus musculus;
 KW Chimeric Homo sapiens;
 KW Chimeric synthetic.

FT Key Location/Qualifiers
 FT region 1..23
 FT /label= FR1
 FT /note= "REI framework region 1"
 FT 24..34
 FT /label= CDR1
 FT /note= "21.6 complementarity determining region 1"
 FT 35..49
 FT /label= FR2
 FT /note= "REI framework region 2"
 FT misc-difference 45
 FT /note= "REI Lys-45 is subst. by Lys of mouse
 FT 21.6 VL, important in supporting the
 FT CDR2 loop"
 FT misc-difference 49
 FT /note= "REI Tyr-49 is subst. by His of mouse
 FT 21.6 VL, located at the binding site"
 FT 50..56
 FT /label= CDR2
 FT /note= "21.6 complementarity determining region 2"
 FT 57..88
 FT /label= FR3
 FT region

FT /note= "REI framework region 3"
 FT misc-difference 58
 FT /note= "REI Val-58 is subst. by Ile of mouse
 FT 21.6 VL, important in supporting the CDR2
 FT loop"
 FT misc-difference 69
 FT /note= "REI Thr-69 is subst. by Arg of mouse
 FT 21.6 VL, involved in antibody-antigen
 FT binding"
 FT 89..96
 FT /label= CDR3
 FT /note= "21.6 complementarity determining region 3"
 FT 97..106
 FT /label= FR4
 FT /note= "REI framework region 4"
 FT misc-difference 103
 FT /note= "REI Leu-103 subst. by Val, more typical
 FT of human kappa light chain J region"
 FT misc-difference 104
 FT /note= "REI Gln-104 subst. by Glu, more typical
 FT of human kappa light chain J region"
 FT misc-difference 106
 FT /note= "REI Thr-106 subst. by Lys, more typical
 FT of human kappa light chain J region"
 FT W05718838-A1.
 PD 29-MAY-1997.
 PR 21-NOV-1996; U18807.
 PA (ATHE-) ATHENA NEUROSCIENCES INC.
 PI Bendis KM, Jones ST, Leger OJ, Saldanha J, Yednock TA;
 DR MPI; 97-297879/27.
 PT Uses of humanised alpha-4 integrin antibody - for treatment of
 PT asthma, atherosclerosis, AIDS, dementia, etc.
 PS Claim 25; Fig 6; 107pp; English.
 CC This polypeptide, designated Ia, comprises the light chain variable
 CC region (VL) of a humanised alpha-4 integrin antibody 21.6. It is
 CC composed of complementarity determining regions (CDRs) from the VL
 CC region (see W22409) of mouse alpha-4 integrin monoclonal antibody
 CC 21.6 and a modified human REI framework. It can be expressed in
 CC mammalian host cells following PCR amplification and mutagenesis
 CC of appropriate fragments of mouse and human DNA sequences. The
 CC humanised 21.6 VL and a humanised 21.6 VH (see W22413) can be used
 CC to produce a claimed humanised 21.6 antibody that is useful in the
 CC manufacture of a medicament for treating asthma, atherosclerosis,
 CC AIDS, dementia, diabetes, inflammatory bowel disease, rheumatoid
 CC arthritis, transplant rejection, graft versus host disease, tumour
 CC metastasis, nephritis, atopic dermatitis, psoriasis, myocardial
 CC ischemia, and acute leukocyte mediated lung injury. The antibody
 CC may also be used in the affinity purification of alpha-4 integrin
 CC for use as a vaccine or an immunogen. It is also useful for
 CC generating idiotypic antibodies. The humanised antibody has a
 CC half-life in the human circulation essentially equivalent to that
 CC of naturally occurring human antibodies.
 SO Sequence 106 AA;

Query Match 100.0%; Score 63; DB 24; Length 106;
 Best Local Similarity 100.0%; Pred. No. 3.52e+00;
 Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 4 mtgspsslsas 14
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 OY 24 MTQSPSSLSAS 34

RESULT 13
 ID W41390 standard; Protein; 107 AA.
 AC W41390;
 DT 02-JUN-1998 (first entry)
 DE Anti-CEA antibody light chain variable region VK4.
 KW Anti-CEA antibody; carcinoembryonic antigen; 806.077 Ab; cancer therapy;
 KW cancer diagnosis; complementarity determining region; light chain.
 OS Synthetic.
 PN W09742329-A1.

M P E R E H
(TM)

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Mpsrch_pp protein - protein database search, using Smith-Waterman algorithm
Date: Tue Mar 23 15:20:39 1999; Maspar time 1.37 Seconds
Tabular output not generated. 34.477 Million cell updates/sec

Title: >US-08-766-350A-4
Description: (31-35) from US08766350A.pep (2 of 4)
Perfect Score: 31
Sequence: 1 VRSGA 5

Scoring table: PAM 150
Gap 11

Searched: 100342 seqs, 9469514 residues

Post-processing: Minimum Match 0%
Listing first 45 summaries

Database: a-issued
1:5A_COMB 2:5B_COMB 3:PCT9_COMB 4:backfiles1

Statistics: Mean 11.797; Variance 23.980; scale 0.492

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Hit	Score	Query Match	Length	DB	ID	Description	Pred. No.
1	31	100.0	124	2	US-08-471-	Sequence 6, Applicatio	1.86e+02
2	31	100.0	124	1	US-08-017-	Sequence 4, Applicatio	1.86e+02
3	31	100.0	124	3	US-08-471-	Sequence 4, Applicatio	1.86e+02
4	31	100.0	124	3	PCT-US94-0	Sequence 6, Applicatio	1.86e+02
5	31	100.0	124	1	US-08-017-	Sequence 6, Applicatio	1.86e+02
6	31	100.0	124	3	PCT-US94-0	Sequence 6, Applicatio	1.86e+02
7	31	100.0	221	2	US-08-542-	Sequence 4, Applicatio	1.86e+02
8	31	100.0	341	1	US-08-314-	Sequence 5, Applicatio	1.86e+02
9	31	100.0	386	2	US-08-663-	Sequence 19, Applicatio	1.86e+02
10	31	100.0	484	1	US-08-482-	Sequence 26, Applicatio	1.86e+02
11	31	100.0	484	1	US-08-127-	Sequence 26, Applicatio	1.86e+02
12	31	100.0	659	1	US-08-136-	Sequence 3, Applicatio	1.86e+02
13	31	100.0	659	2	US-08-479-	Sequence 3, Applicatio	1.86e+02
14	31	100.0	691	3	PCT-US91-0	Sequence 2, Applicatio	1.86e+02
15	29	93.5	73	2	US-08-379-	Sequence 7, Applicatio	3.70e+02
16	29	93.5	185	4	5514590-10	Patent No. 5514590.	3.70e+02
17	29	93.5	185	1	US-08-278-	Sequence 14, Applicatio	3.70e+02
18	29	93.5	185	1	US-08-483-	Sequence 14, Applicatio	3.70e+02
19	29	93.5	185	1	US-08-472-	Sequence 14, Applicatio	3.70e+02
20	29	93.5	185	2	US-08-487-	Sequence 14, Applicatio	3.70e+02
21	29	93.5	299	4	5514590-4	Patent No. 5514590.	3.70e+02
22	29	93.5	396	2	US-08-926-	Sequence 2, Applicatio	3.70e+02
23	29	93.5	421	2	US-07-955-	Sequence 27, Applicatio	3.70e+02

24	29	93.5	471	3	PCT-US95-0	Sequence 2, Applicatio	3.70e+02
25	29	93.5	516	1	US-08-356-	Sequence 4, Applicatio	3.70e+02
26	29	93.5	553	2	US-08-661-	Sequence 16, Applicatio	3.70e+02
27	29	93.5	559	2	US-08-406-	Sequence 20, Applicatio	3.70e+02
28	29	93.5	1018	1	US-08-714-	Sequence 6, Applicatio	3.70e+02
29	29	93.5	1018	2	US-08-452-	Sequence 2, Applicatio	3.70e+02
30	29	93.5	1018	1	US-08-408-	Sequence 6, Applicatio	3.70e+02
31	29	93.5	1018	1	US-08-408-	Sequence 6, Applicatio	3.70e+02
32	29	93.5	1045	1	US-07-783-	Sequence 6, Applicatio	3.70e+02
33	29	93.5	1045	1	US-07-934-	Sequence 6, Applicatio	3.70e+02
34	29	93.5	1045	1	US-07-596-	Sequence 6, Applicatio	3.70e+02
35	28	90.3	275	4	5472855-4	Patent No. 5472855.	5.19e+02
36	28	90.3	380	4	RE34606-2	Patent No. RE34,606.	5.19e+02
37	28	90.3	616	2	US-08-638-	Sequence 35, Applicatio	5.19e+02
38	28	90.3	774	1	US-07-747-	Sequence 3, Applicatio	5.19e+02
39	28	90.3	774	1	US-08-019-	Sequence 5, Applicatio	5.19e+02
40	28	90.3	780	2	US-08-786-	Sequence 14, Applicatio	5.19e+02
41	28	90.3	853	2	US-08-638-	Sequence 27, Applicatio	5.19e+02
42	28	90.3	853	2	US-08-638-	Sequence 31, Applicatio	5.19e+02
43	28	90.3	1958	1	US-07-945-	Sequence 2, Applicatio	5.19e+02
44	28	90.3	2842	1	US-08-289-	Sequence 7, Applicatio	5.19e+02
45	28	90.3	2873	2	US-08-638-	Sequence 2, Applicatio	5.19e+02

ALIGNMENTS

RESULT	1	STANDARD:	PRT:	124 AA.
ID	US-08-471-426-6			
XX	xxxxxx			

Sequence 6, Application US/08471426

Patent No. 5808033
GENERAL INFORMATION:

APPLICANT: GOURLIE, BRIAN B

APPLICANT: RIXON, MARK W

APPLICANT: MEZES, PETER S

APPLICANT: KAPLAN, DONALD A

APPLICANT: SCHLOW, JEFFREY

TITLE OF INVENTION: A NOVEL FAMILY OF ANTI-CARCINOEMBRYONIC

TITLE OF INVENTION: ANTIGEN CHIMERIC ANTIBODIES

NUMBER OF SEQUENCES: 24

CORRESPONDENCE ADDRESSES:

ADDRESSEE: Duane C. Ulmer

STREET: P.O. Box 1967

CITY: Midland

STATE: MI

COUNTRY: US

ZIP: 48641-1967

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PatentIn Release #1.0, Version #1.25

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/471,426

FILING DATE: 06-JUN-1995

CLASSIFICATION: 536

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 08/017,570

FILING DATE: 16-FEB-1993

ATTORNEY/AGENT INFORMATION:

NAME: ULMER, DUANE C

REGISTRATION NUMBER: 34,941

REFERENCE/DOCKET NUMBER: C-38,777

TELECOMMUNICATION INFORMATION:

TELEPHONE: (517) 636-8104

INFORMATION FOR SRO ID NO: 6:

SEQUENCE CHARACTERISTICS:

CC LENGTH: 124 amino acids
CC TYPE: amino acid
CC TOPOLOGY: linear
CC MOLECULE TYPE: protein
SO SEQUENCE 124 AA; 13816 MW; 93186 CN;

Query Match 100.0%; Score 31; DB 2; Length 124;
Best Local Similarity 100.0%; Pred. No. 1.86e+02;
Matches 5; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 12 VRSGA 16
11111
OY 31 VRSGA 35

RESULT 2
ID US-08-017-570-4 STANDARD; PRT: 124 AA.

xxxxxx

DE Sequence 4, Application US/08017570
XX Patent No. 5472693
CC GENERAL INFORMATION:

CC APPLICANT: GOURLE, BRIAN B
CC APPLICANT: RIXON, MARK W
CC APPLICANT: MEZES, PETER S
CC APPLICANT: KAPLAN, DONALD A
CC APPLICANT: SCHLON, JEFFREY
CC TITLE OF INVENTION: A NOVEL FAMILY OF ANTI-CARCINOEMBRYONIC
CC TITLE OF INVENTION: ANTIGEN CHIMERIC ANTIBODIES
CC NUMBER OF SEQUENCES: 24
CC CORRESPONDENCE ADDRESS:
CC ADDRESSEE: Duane C. Ulmer
CC STREET: P.O. Box 1967
CC CITY: Midland
CC STATE: MI
CC COUNTRY: US

CC ZIP: 48641-1967
CC COMPUTER READABLE FORM:
CC MEDIUM TYPE: Floppy disk
CC COMPUTER: IBM PC compatible
CC OPERATING SYSTEM: PC-DOS/MS-DOS
CC SOFTWARE: Patentin Release #1.0, Version #1.25
CC CURRENT APPLICATION DATA:
CC APPLICATION NUMBER: US/08/017,570
CC FILING DATE: 19930216
CC CLASSIFICATION: 424

CC ATTORNEY/AGENT INFORMATION:
CC NAME: ULMER, DUANE C
CC REGISTRATION NUMBER: 34,941
CC REFERENCE/DOCKET NUMBER: C-38,777
CC TELECOMMUNICATION INFORMATION:
CC TELEPHONE: (517) 636-8104
CC INFORMATION FOR SEQ ID NO: 4:
CC SEQUENCE CHARACTERISTICS:
CC LENGTH: 124 amino acids
CC TYPE: AMINO ACID
CC TOPOLOGY: linear
CC MOLECULE TYPE: protein
CC SEQUENCE 124 AA; 13786 MW; 91250 CN;

Query Match 100.0%; Score 31; DB 1; Length 124;
Best Local Similarity 100.0%; Pred. No. 1.86e+02;
Matches 5; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 12 VRSGA 16
11111
OY 31 VRSGA 35

RESULT 3
ID US-08-471-426-4 STANDARD; PRT: 124 AA.
XX
AC xxxxxx
XX

DE Sequence 4, Application US/08471426

CC Patent No. 5808033
CC GENERAL INFORMATION:

CC APPLICANT: GOURLE, BRIAN B
CC APPLICANT: RIXON, MARK W
CC APPLICANT: MEZES, PETER S
CC APPLICANT: KAPLAN, DONALD A
CC APPLICANT: SCHLON, JEFFREY
CC TITLE OF INVENTION: A NOVEL FAMILY OF ANTI-CARCINOEMBRYONIC
CC TITLE OF INVENTION: ANTIGEN CHIMERIC ANTIBODIES
CC NUMBER OF SEQUENCES: 24
CC CORRESPONDENCE ADDRESS:
CC ADDRESSEE: Duane C. Ulmer
CC STREET: P.O. Box 1967
CC CITY: Midland
CC STATE: MI
CC COUNTRY: US

CC ZIP: 48641-1967
CC COMPUTER READABLE FORM:
CC MEDIUM TYPE: Floppy disk
CC COMPUTER: IBM PC compatible
CC OPERATING SYSTEM: PC-DOS/MS-DOS
CC SOFTWARE: Patentin Release #1.0, Version #1.25
CC CURRENT APPLICATION DATA:
CC APPLICATION NUMBER: US/08/471,426
CC FILING DATE: 06-JUN-1995
CC CLASSIFICATION: 536

CC PRIOR APPLICATION DATA:
CC APPLICATION NUMBER: 08/017,570
CC FILING DATE: 16-FEB-1993
CC ATTORNEY/AGENT INFORMATION:
CC NAME: ULMER, DUANE C
CC REGISTRATION NUMBER: 34,941
CC REFERENCE/DOCKET NUMBER: C-38,777
CC TELECOMMUNICATION INFORMATION:
CC TELEPHONE: (517) 636-8104
CC INFORMATION FOR SEQ ID NO: 4:
CC SEQUENCE CHARACTERISTICS:
CC LENGTH: 124 amino acids
CC TYPE: amino acid
CC TOPOLOGY: linear
CC MOLECULE TYPE: protein
CC SEQUENCE 124 AA; 13786 MW; 91250 CN;

Query Match 100.0%; Score 31; DB 2; Length 124;
Best Local Similarity 100.0%; Pred. No. 1.86e+02;
Matches 5; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 12 VRSGA 16
11111
OY 31 VRSGA 35

RESULT 4
ID PCT-US94-01709-6 STANDARD; PRT: 124 AA.

XX xxxxxx
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XX

DE Sequence 6, Application PC/TUS9401709

XX Sequence 6, Application PC/TUS9401709